

## Appearance of the relaxor behavior

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### Abstract

© 2015, Pleiades Publishing, Inc. A model of the appearance of the relaxor behavior in  $\text{Pb}_{1-y}\text{La}_y(\text{Zr}_{1-x}\text{Ti}_x)_2\text{O}_7$  under the variation of the lanthanum concentration has been proposed. The temperature behavior of the permittivity in the region of the diffuse phase transition and dispersion of the dielectric properties associated with the dynamics of the charge delocalization on defects has been explained. The consideration has been performed on the basis of the simple thermodynamic ideas within the theory of the Ginzburg-Landau phase transitions in the system with defects.

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